

Table 5-5
Upland Areas Alternative 2 Cost Estimate
Institutional Controls, Hotspot Removal (HQ = 10), Groundwater Monitoring and 2-foot Soil Cover
Investigation Area H1
Mare Island, Vallejo, California

	Quantity	Unit	Unit Price	Cost	Source/Subtotal	COMMENTS
Soil Removal (Hot Spots + Green Sand Area)						
Mobilization	1	LS	\$ 8,400	\$ 8,400		
Excavation (Labor)	220	HR	\$ 720	\$ 158,400		Crew rate based on 8 equipment operators/site workers
Excavation (Equipment)	220	HR	\$ 395	\$ 86,900		Equipment rate based on 2 dump trucks (30-ton), excavator (CAT 330), compactor (CAT 815F), water truck and fuel
Munitions Avoidance Support	220	HR	\$ 83	\$ 18,260		
Soil Testing	1	LS	\$ 16,800	\$ 16,800		
Estimate based on monthly effort for hot spot soil removal Assumes 16,500 cubic yards of soil removed per month				\$ 288,760		Cost per month of Hot Spot excavating \$288,760 per month/16500 yards per month = \$17.50 per yard
Costs for Alternatives are based on \$17.50 per cubic yard	46,880	CY	\$ 17.50		\$ 820,000	Cost for Alternative 2
Backfilling Excavations						
Mobilization	1	LS	\$ 4,400	\$ 4,400		
Backfilling (Labor)	220	HR	\$ 475	\$ 104,500		Crew rate based on 4 equipment operators/site workers
Backfilling (Equipment)	220	HR	\$ 230	\$ 50,600		Equipment rate based on scraper (CAT 623), excavator (CAT 330), water truck and fuel
General Fill	22,000	CY	\$ 3.50	\$ 77,000		
Estimate based on monthly effort for backfilling hot spots Assumes 22,000 cubic yards of soil backfilled per month				\$ 236,500		Cost per month of Hot Spot backfilling \$236,500 per month/22,000 yards per month = \$10.75 per yard
Costs for Alternatives are based on \$10.75 per cubic yard	53,870	CY	\$ 10.75		\$ 579,000	Cost for Alternative 2
2-Foot Soil Cover						
Mobilization	1	LS	\$ 5,000	\$ 5,000		
Soil Cover (Labor)	220	HR	\$ 595	\$ 130,900		Crew rate based on 5 equipment operators/site workers
Soil Cover (Equipment)	220	HR	\$ 290	\$ 63,800		Equipment rate based on scraper (CAT 623), CAT D6 dozer, grader (CAT 14G), water truck and fuel
General Fill	96,800	CY	\$ 3.50	\$ 338,800		
Seeding	36	AC	\$ 2,000	\$ 71,320		
					\$ 607,000	

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Install 3 GW monitoring wells	3	EA	\$ 4,369	\$ 13,107	SWBZ GW wells
Groundwater Sampling	1	LS	\$ 16,000	\$ 16,000	SWBZ well sampling 3-5 wells.
Deed Restriction	1	EST	\$ 51,900	\$ 51,900	
Institutional Controls	1	EST	\$ 38,000	\$ 38,000	
Confirmation Samples	40	EA	\$ 500	\$ 20,000	
				\$ 139,000	
Sub Total				\$ 2,145,000	
Engineering (4%) Cost				\$ 86,000	
Field Administration (7%) Cost				\$ 150,000	
Cost Sub Total				\$ 2,381,000	
25% contingency				\$ 595,000	
Report Total				\$ 2,976,000	